

# Making business decisions based on big data analytics 1/27/24



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The large amount of information being generated every second has changed the way business decisions are made in today's data-based world. It's important for tax and financial professionals to understand what opportunities and solutions big data has to offer. If you are using improved data analytics processes with appropriate algorithms, big data can give you a detailed picture of financial trends, customer behaviours and operational efficiency. This article explores the foundations of big data analytics and the scope for using the available data to make strategic decisions and drive growth in your organisation.

## What is big data?

Big data means large amounts of structured and unstructured data derived from a variety of sources, such as transaction entries, customer communications, social media activities and machine-generated data. Big data analytics involves processing and analysing those large data sets to uncover trends, models, correlations and meaningful insights.

## The role of big data in business

### *Data collection and storage*

When it comes to creating data architecture, organisations need to carefully consider what data they should be gathering, storing and retaining so it can be meaningfully used in analysis. Not all data is equally valuable, so it's important to select appropriate and high-quality data sources, develop data management guidelines including privacy rules, and choose an appropriate data store. If data can be accessed in real time and is easy to manage, organisations can make accurate decisions quickly.

### *Customer analytics*

A key advantage of big data is the ability to give organisations an in-depth understanding of their customers. Analysing their customer behaviour and feedback can result in organisations developing more personalised marketing strategies and improving customer satisfaction. Customer segmentation allows organisations to identify specific customer groups with similar needs and desires so they can tailor their offers and communications. And analysing real-time data helps organisations respond to changes in customer behaviour quickly, optimise customer experience and increase customer loyalty. This data-driven approach allows organisations not only to retain their existing customers but to attract new ones based on data-driven insights.

### *Operational efficiency*

Big data analytics can significantly improve operational efficiency. Analysing their supply chain data can help organisations identify weaknesses in their processes, predict demand and adjust their inventory levels. Logistics companies can use real-time data from global positioning systems to optimise their routes

and delivery schedules for timely deliveries and reduced fuel costs. Manufacturing companies using big data can monitor their machinery performance, undertake preventive maintenance and reduce idle time. Also, analysing workers' productivity data can help improve their work schedules and allocation of resources.

### *Financial analytics*

Big data plays a decisive role in financial analytics. Using the publicly available lists of sanctions and tax debtors can help organisations conduct more accurate risk assessments, minimise potential financial loss and mitigate reputational risk. Financial institutions using big data analytics can spot unusual activities and suspicious transactions that may indicate fraud. Big data analytics also helps organisations make more accurate financial predictions so they can plan their budgets and investments more effectively, leading to improved profitability and sustainable growth.

## Key takeaways

From more accurate risk assessments to customer behaviour analysis and operational efficiency improvements, big data analytics provides important insights that help organisations respond to market changes faster and optimise their operations. Not only does big data analytics improve financial predictions and resource management, but it also enables more personalised marketing strategies that increase customer loyalty. Thus, big data analytics becomes a significant competitive advantage that strengthens your position in the global business landscape.